

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-95. (Canceled).

96. (Currently Amended) An apparatus for reinforcing a bifurcated lumen comprising:

a proximal stent having a proximal end and a distal end, the proximal stent further having a proximal orifice at the proximal end to be located in and when expanded to be supported by a vascular vessel;

at least one distal stent having a proximal end and a distal end comprising a male engaging portion having a frustoconical configuration that flares outward on the proximal end from an elongate cylinder extending from a medial portion to the distal end of the at least one distal stent;

the proximal stent having two transversely placed tapering portions that extend from an intermediate portion to the distal end of the proximal stent to reinforce the bifurcated lumen;

the proximal stent also having at least one distal orifice at [[the]] a distal end of at least one of the tapering portions which when in an expanded configuration serves to receive the male engaging portion having the frustoconical configuration of the at least one distal stent completely within a female engaging portion of the distal orifice, wherein the frustoconical configuration terminates at the proximal end of the at least one distal stent and the tapering portions terminate at the distal end of

the proximal stent and wherein the distal orifice remains in the expanded configuration after receiving the male engaging portion;

wherein the proximal stent and the at least one distal stent each comprises an expandable stent constructed with a wire skeleton having one or more parts that extends from the respective proximal ends to the respective distal ends to further reinforce the bifurcated lumen;

wherein the proximal stent and the at least one distal stent each comprises a plurality of hoops which are axially displaced in a tubular configuration along a common axis, each of said hoops being formed by a substantially complete turn of a sinuous wire having apices and having a circumference that lies in a plane substantially perpendicular to the longitudinal common axis of said stent hoops, wherein apices of adjacent hoops are juxtaposed to one another and at least two juxtaposed apices are connected by a securing means; and

wherein a cross-sectional area of the at least one distal orifice when expanded is sufficiently less than that of the proximal end of the at least one distal stent when expanded within the at least one distal orifice so as to at least partially secure together the proximal and distal stents.

97. (Previously Presented) The apparatus according to claim 96, wherein the intermediate portion to the distal end of the proximal stent has a first intermediate portion which forms an extended distal portion, and a second intermediate portion which has a distal orifice which has a relatively short inclined extension forming one of the transversely spaced tapered portions to enable the distal stent to be located therein when the short extension has been expanded, the distal stent having the proximal end which when expanded will at least partially secure with the short extension.

98. (Previously Presented) The apparatus according to claim 96, wherein the distal end of the proximal stent has first and second distal portions formed from the

two transversely placed tapering portions, the first distal portion having the at least one distal orifice and the second distal portion having another distal orifice for the receipt of the at least one distal stent, each of which will have a stent expandable to a cross-sectional area sufficiently greater than the cross-sectional area(s) of the distal orifices to at least partially secure together the proximal and distal stents.

99. (Previously Presented) The apparatus according to claim 96, wherein a portion of at least one of the proximal stent and the distal stent has a different radiopacity, the portion of different radiopacity facilitating proper alignment of the proximal and distal stents.

100. (Previously Presented) The apparatus according to claim 96, further comprising:

radiographic indicia defined on at least one of the proximal stent and the distal stent and having different radiopacity from the stent, wherein a composite radiographic image of the radiographic indicia varies with a rotational orientation of the at least one of the proximal stent and the distal stent;

wherein the rotational orientation of the at least one of the proximal stent and the distal stent in the vascular vessel of a body lumen or the bifurcated lumen is indicated by the radiographic image for optional adjustment of the rotational orientation.

101. (Previously Presented) The apparatus according to claim 96, wherein an assembly of the proximal and the distal stents is configured for placement at an anegeological bifurcation of a vessel into two branched vessels, the proximal stent defining two lumens, at least one of which is configured to be disposed entirely within said vessel and is adapted to secure to the distal stent configured to extend into one of the two branched vessels.

BIFURCATED ENDOLUMINAL PROSTHESIS

Application No. 08/461,402

Amendment dated November 30, 2011

Reply to Office Action of September 7, 2011

102. (Currently Amended) The apparatus according to claim 101, the assembly of the proximal and the distal stents further comprising the at least one female engaging portion having a frustoconical configuration that tapers inward toward the at least one distal orifice at the distal end of the proximal stent, the male engaging portion being configured to be positioned completely within the female engaging portion for inter-engagement between [[the]] an outer surface of the male engaging portion and [[the]] an inner surface of the female engaging portion to resist longitudinal movement to at least partially secure the male engaging portion to the female engaging portion, each of the male engaging portion and the female engaging portion comprising a stent with complementary flared and tapered frustoconical wired skeletons.

103. (Previously Presented) The apparatus according to claim 102, the assembly of the proximal and the distal stents further comprising at least one of the proximal stent and the distal stent having a fabric layer attached to the stent, the fabric layer being configured to be interposed between the male engaging portion and the female portion to form a substantially fluid-tight seal upon assembly.

104. (Currently Amended) An apparatus for reinforcing a bifurcated lumen comprising:

a proximal stent having a proximal end and a distal end, the proximal stent being expandable and having a proximal orifice at the proximal end;

first and second distal stents each having a proximal end and a distal end comprising a male engaging portion having a frustoconical configuration that flares outward on the proximal end from an elongate cylinder extending from a medial portion to the distal end of the first and second distal stents;

the proximal stent having two transversely placed tapering portions that extend from an intermediate portion to the distal end of the proximal stent to reinforce the bifurcated lumen;

the proximal stent also having a distal orifice at [[the]] a distal end of at least one of the tapering portions that when in an expanded configuration receives the male engaging portion having the frustoconical configuration of at least one proximal end of the first and second distal stents completely within a female engaging portion of the distal orifice, wherein the frustoconical configuration terminates at the proximal end of the first and second distal stents and the tapering portions terminate at the distal end of the proximal stent and wherein the distal orifice remains in the expanded configuration after receiving the male engaging portion;

wherein each of the proximal and distal stents comprises an expandable stent constructed with a wire skeleton having one or more parts that extends from the respective proximal ends to the respective distal ends to further reinforce the bifurcated lumen;

wherein the proximal stent and the at least one distal stent each comprises a plurality of hoops which are axially displaced in a tubular configuration along a common axis, each of said hoops being formed by a substantially complete turn of a sinuous wire having apices and having a circumference that lies in a plane substantially perpendicular to the longitudinal common axis of said stent hoops, wherein apices of adjacent hoops are juxtaposed to one another and at least two juxtaposed apices are connected by a securing means; and

wherein a cross-sectional area of the at least one distal orifice of the proximal stent when expanded is sufficiently less than a cross-sectional area of [[a]] the proximal end of the first or second distal stent when expanded within the at least one distal orifice, so as to at least partially secure together the proximal and first or second distal stents at the at least one distal orifice when the proximal end of the first or second distal stents is expanded therein.

105. (Previously Presented) The apparatus according to claim 104, wherein the proximal and distal stents are further secured with a suture.

106. (Currently Amended) An apparatus for reinforcing a bifurcated lumen comprising:

a proximal stent and a pair of distal stents each having a proximal end and a distal end, the proximal stent being expandable and having the distal end and a proximal orifice at the proximal end, the proximal stent having two transversely placed tapering portions that extend from an intermediate portion to the distal end of the proximal stent to reinforce the bifurcated lumen, the proximal stent also having two distal orifices at the distal ends of the tapering portions which when in an expanded configuration serve to receive the proximal ends of the pair of distal stents comprising a male engaging portion each having a frustoconical configuration that flares outward on the proximal end from an elongate cylinder extending from a medial portion to the distal end, wherein the male engaging portions having the frustoconical configurations of the pair of distal stents are each positioned completely within a female engaging portion of each of the two distal orifices, wherein the frustoconical configuration terminates at the proximal ends of the pair of distal stents and the tapering portions terminate at the distal end of the proximal stent and wherein each of the two distal orifices remain in the expanded configuration after receiving the male engaging portion, wherein each of the proximal and distal stents comprises an expandable stent constructed with a wire skeleton having one or more parts that extends from the respective proximal ends to the respective distal ends to further reinforce the bifurcated lumen, wherein the proximal stent and the at least one distal stent each comprises a plurality of hoops which are axially displaced in a tubular configuration along a common axis, each of said hoops being formed by a substantially complete turn of a sinuous wire having apices and having a circumference that lies in a plane substantially perpendicular to the longitudinal common axis of said stent hoops, wherein apices of adjacent hoops are juxtaposed to one another and at least two juxtaposed apices are connected by a securing means, and wherein cross-sectional areas of each of the two distal orifices

of the proximal stent when expanded are sufficiently less than cross-sectional areas of each of the proximal ends of the distal stents when expanded within the distal orifices to at least partially secure together the proximal and distal stents at the distal orifice when the proximal end of the distal stents are expanded therein.